

PATENT COOPERATION TREATY

PCT

NOTIFICATION OF THE RECORDING
OF A CHANGE(PCT Rule 92bis.1 and
Administrative Instructions, Section 422)

From the INTERNATIONAL BUREAU

To:

EYLES, Christopher, Thomas
W.P. Thompson & Co.
Celcon House
289-293 High Holborn
London WC1V 7HU
ROYAUME-UNI

Date of mailing (day/month/year) 28 August 2001 (28.08.01)	IMPORTANT NOTIFICATION
Applicant's or agent's file reference CTE/PL62889WO	
International application No. PCT/GB00/00363	International filing date (day/month/year) 07 February 2000 (07.02.00)

1. The following indications appeared on record concerning:									
<input checked="" type="checkbox"/> the applicant	<input type="checkbox"/> the inventor <input type="checkbox"/> the agent <input type="checkbox"/> the common representative								
Name and Address H.B. FULLER COATINGS LTD. 95 Aston Church Road Nechells Birmingham B7 7QR United Kingdom	<table border="1"> <tr> <td>State of Nationality GB</td> <td>State of Residence GB</td> </tr> <tr> <td colspan="2">Telephone No.</td> </tr> <tr> <td colspan="2">Facsimile No.</td> </tr> <tr> <td colspan="2">Teleprinter No.</td> </tr> </table>	State of Nationality GB	State of Residence GB	Telephone No.		Facsimile No.		Teleprinter No.	
State of Nationality GB	State of Residence GB								
Telephone No.									
Facsimile No.									
Teleprinter No.									
2. The International Bureau hereby notifies the applicant that the following change has been recorded concerning:									
<input checked="" type="checkbox"/> the person	<input type="checkbox"/> the name <input type="checkbox"/> the address <input type="checkbox"/> the nationality <input type="checkbox"/> the residence								
Name and Address	<table border="1"> <tr> <td>State of Nationality</td> <td>State of Residence</td> </tr> <tr> <td colspan="2">Telephone No.</td> </tr> <tr> <td colspan="2">Facsimile No.</td> </tr> <tr> <td colspan="2">Teleprinter No.</td> </tr> </table>	State of Nationality	State of Residence	Telephone No.		Facsimile No.		Teleprinter No.	
State of Nationality	State of Residence								
Telephone No.									
Facsimile No.									
Teleprinter No.									
3. Further observations, if necessary: Deletion of applicant for all designated States except US due to assignment of rights to Security Composites Ltd., which has become sole applicant.									
4. A copy of this notification has been sent to:									
<input checked="" type="checkbox"/> the receiving Office	<input type="checkbox"/> the designated Offices concerned								
<input type="checkbox"/> the International Searching Authority	<input checked="" type="checkbox"/> the elected Offices concerned								
<input type="checkbox"/> the International Preliminary Examining Authority	<input type="checkbox"/> other:								

The International Bureau of WIPO 34, chemin des Colombettes 1211 Geneva 20, Switzerland Facsimile No.: (41-22) 740.14.35	Authorized officer Anman QIU Telephone No.: (41-22) 338.83.38
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PATENT COOPERATION TREATY

PCT

NOTIFICATION OF ELECTION

(PCT Rule 61.2)

From the INTERNATIONAL BUREAU

To:

Assistant Commissioner for Patents
United States Patent and Trademark
Office
Box PCT
Washington, D.C.20231
ETATS-UNIS D'AMERIQUE

in its capacity as elected Office

Date of mailing (day/month/year) 18 October 2000 (18.10.00)	
International application No. PCT/GB00/00363	Applicant's or agent's file reference CTE/PL62889WO
International filing date (day/month/year) 07 February 2000 (07.02.00)	Priority date (day/month/year) 08 February 1999 (08.02.99)
Applicant DODD, Keith, Herbert et al	

1. The designated Office is hereby notified of its election made:

☒ in the demand filed with the International Preliminary Examining Authority on:
08 September 2000 (08.09.00)

☐ in a notice effecting later election filed with the International Bureau on:

2. The election ☒ was
☐ was not

made before the expiration of 19 months from the priority date or, where Rule 32 applies, within the time limit under Rule 32.2(b).

The International Bureau of WIPO 34, chemin des Colombettes 1211 Geneva 20, Switzerland	Authorized officer Pascal Piriou
Facsimile No.: (41-22) 740.14.35	Telephone No.: (41-22) 338.83.38



INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(51) International Patent Classification ⁷ : C08K 7/02, F28F 19/04, 21/06	A1	(11) International Publication Number: WO 00/47664 (43) International Publication Date: 17 August 2000 (17.08.00)
(21) International Application Number: PCT/GB00/00363 (22) International Filing Date: 7 February 2000 (07.02.00) (30) Priority Data: 9902758.3 8 February 1999 (08.02.99) GB (71) Applicants (for all designated States except US): H.B. FULLER COATINGS LTD. [GB/GB]; 95 Aston Church Road, Nechells, Birmingham B7 7QR (GB). SECURITY COMPOSITES LIMITED [GB/GB]; The Glade, Redhill, Hookagete, Shrewsbury, Shropshire SY5 8BP (GB). (72) Inventors; and (75) Inventors/Applicants (for US only): DODD, Keith, Herbert [GB/GB]; 5 Parson's Drive, Richmond Park, Gnosall, Staffordshire ST20 0QS (GB). WELTON, Nicholas, Jason [GB/GB]; 19 Augusta Road, Acocks Green, Birmingham B27 6LA (GB). PRICE, Christopher, Barry [GB/GB]; The Glade, Redhill, Hookagete, Shrewsbury SY5 8BP (GB). (74) Agent: EYLES, Christopher, Thomas; W.P. Thompson & Co., Celcon House, 289-293 High Holborn, London WC1V 7HU (GB).		(81) Designated States: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CU, CZ, DE, DK, DM, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, ARIPO patent (GH, GM, KE, LS, MW, SD, SL, SZ, TZ, UG, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG). Published <i>With international search report.</i> <i>Before the expiration of the time limit for amending the claims and to be republished in the event of the receipt of amendments.</i>
(54) Title: HEAT TRANSFER ELEMENT		
(57) Abstract <p>The invention relates to a heat transfer element made of a polymer matrix having a fibrous material interspersed therein, said heat transfer element comprising a fluoropolymer at least on an outer surface thereof, the interspersed of the fibrous material within the polymer matrix providing rigidity to the heat transfer element, a thermally conductive material being distributed within the heat transfer element. Such a heat transfer element can be used in the manufacture of radiant panels for power generating stations or can be formed as a pipe for similar use. The heat transfer element may comprise a polymer sheet having a fibrous material distributed therein providing structural strength and a fluoropolymer at least on an outer surface of the element which protects the element from physical and chemical corrosion whilst providing anti-fouling properties and good flow characteristics to the element. A thermally conductive material is distributed within the element to provide the necessary heat transfer characteristics.</p>		

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INTERNATIONAL SEARCH REPORT

Int. l. Application No

PCT/GB 00/00363

A. CLASSIFICATION OF SUBJECT MATTER

IPC 7 C08K7/02 F28F19/04 F28F21/06

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

IPC 7 C08K F28F

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	PATENT ABSTRACTS OF JAPAN vol. 012, no. 471 (M-773), 9 December 1988 (1988-12-09) & JP 63 194195 A (JUNKOSHA CO LTD), 11 August 1988 (1988-08-11) abstract	1-3, 15, 16, 21, 26
X	EP 0 203 213 A (SIGRI GMBH) 3 December 1986 (1986-12-03) cited in the application claims 1, 3, 6, 7	1, 2, 15, 16, 21, 23, 26-28
	--- -/-	

☒ Further documents are listed in the continuation of box C.

☒ Patent family members are listed in annex.

* Special categories of cited documents :

"A" document defining the general state of the art which is not considered to be of particular relevance

"E" earlier document but published on or after the international filing date

"L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)

"O" document referring to an oral disclosure, use, exhibition or other means

"P" document published prior to the international filing date but later than the priority date claimed

"T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention

"X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone

"Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art.

"&" document member of the same patent family

Date of the actual completion of the international search

14 June 2000

Date of mailing of the international search report

21/06/2000

Name and mailing address of the ISA

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Authorized officer

Russell, G

INTERNATIONAL SEARCH REPORT

International Application No

PCT/GB 00/00363

C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	EP 0 445 523 A (DU PONT) 11 September 1991 (1991-09-11) page 2, line 28 - line 29 page 3, line 55 - line 56 examples 16,18 claims 1,3-5 ---	1-3,15, 16,21, 26-28
X	GB 1 468 410 A (KUREHA CHEMICAL IND CO LTD) 23 March 1977 (1977-03-23) page 2, line 11 - line 29 claims 5,6 ---	1,2,4,5, 11,12, 15,16, 19,21-23
X	US 5 211 220 A (SWOZIL ADOLF ET AL) 18 May 1993 (1993-05-18) claim 1 ---	1-3,11, 15,16,19
X	US 5 036 903 A (SHOOK JAMES R) 6 August 1991 (1991-08-06) figure 3 claims 1,7,8,10 ---	1-3,7, 15,16, 18,19, 21,23
X	US 4 911 227 A (SAITO NAOHIDE ET AL) 27 March 1990 (1990-03-27) claims 1,9,12 ---	1,2,7,8, 11,15, 16, 18-21, 27,28
X	US 5 409 777 A (CLEMENT KATHERINE S ET AL) 25 April 1995 (1995-04-25) example 12 claim 18 ---	1,2,7,8, 12-14,21
P,X	WO 99 35458 A (H B FULLER COATINGS LTD ;WELTON NICHOLAS JASON (GB); DODD KEITH HE) 15 July 1999 (1999-07-15) the whole document -----	1-28

INTERNATIONAL SEARCH REPORT

Information on patent family members

International Application No

PCT/GB 00/00363

Patent document cited in search report		Publication date	Patent family member(s)	Publication date
JP 63194195	A	11-08-1988	NONE	
EP 0203213	A	03-12-1986	BR 8602444 A	27-01-1987
			DE 3564340 D	15-09-1988
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			JP 6001902 A	11-01-1994
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			DE 2421414 A	19-12-1974
US 5211220	A	18-05-1993	DE 3820866 A	28-12-1989
			FR 2633040 A	22-12-1989
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US 5409777	A	25-04-1995	US 5246782 A	21-09-1993
			US 5730922 A	24-03-1998
			CA 2057309 A	11-06-1992
			EP 0490335 A	17-06-1992
			JP 4325237 A	13-11-1992
			US 5364547 A	15-11-1994
WO 9935458	A	15-07-1999	AU 1776399 A	26-07-1999

CLAIMS:

1. A heat transfer element comprising a polymer matrix having a fibrous material interspersed therein, said heat transfer element comprising a fluoropolymer at least on an outer surface thereof, the interspersed of the fibrous material within the polymer matrix providing rigidity to the heat transfer element, a thermally conductive material being distributed within the heat transfer element.
2. A heat transfer element according to claim 1, in the form of a sheet.
3. A heat transfer element according to claim 1, in the form of a tube.
4. A heat transfer element according to any one of claims 1 to 3, in which the fibrous material comprises metal fibres.
5. A heat transfer element according to claim 4, in which the metal fibres comprise iron, steel, or stainless steel fibres.
6. A heat transfer element according to any one of claims 1 to 5, in which the polymer matrix further comprises particles of metal.
7. A heat transfer element according to any one of claims 1 to 6, in which the fibrous material comprises glass fibres.
8. A heat transfer element according to claim 7, in which the glass fibres comprise chemically resistant glass fibres.
9. A heat transfer element according to claim 7 or claim 8, in which the fibrous material comprises a mixture of glass fibres and fibres of a plastics material.
10. A heat transfer element according to claim 9, in which the plastics material comprises a material selected from polypropylene and fluoropolymers.
11. A heat transfer element according to any one of claims

1 to 10, in which the fibrous material comprises continuous fibres.

12. A heat transfer element according to claim 11, in which the fibrous material comprises rovings plaited to form continuous tubes, formed into tapes, or woven into panels.

5 13. A heat transfer element according to claim 12, in which the rovings are precoated with a plastics material.

14. A heat transfer element according to claim 12 or claim 13, in which the fibrous material comprises a continuous tube comprising loosely commingled rovings, wherein the individual
10 rovings extend at an angle of about 10° to about 15° to the tube axis.

15. A heat transfer element which comprises:

a polymer sheet having a fibrous material interspersed therein and comprising a fluoropolymer at least on an outer
15 surface of the sheet, the interspersions of the fibrous material within the sheet providing rigidity to the element; and

a thermally conductive material distributed within the heat transfer element.

20 16. A heat transfer element according to claim 15, wherein the fibrous material is of a thermally conductive material such that the distribution of thermally conductive material within the heat transfer element is provided, in whole or in part, by the fibrous material.

25 17. A heat transfer element according to claim 16, wherein the fibrous material is of stainless steel.

18. A heat transfer element according to claim 16, wherein the fibrous material is fibre glass.

30 19. A heat transfer element according to any one of claims 1 to 18, wherein an intermediate layer of a plastics material

is provided underneath the outer fluoropolymer surface of the element.

20. A heat transfer element according to claim 19, wherein the plastics material comprises an acrylic polymer.

21. A heat transfer element according to any one of claims 1 to 20, wherein the thermally conductive material comprises a particulate or filamented material.

22. A heat transfer element according to claim 21, wherein the particulate or filamented material is a metal.

23. A heat transfer element according to any one of claims 1 to 22, wherein the fluoropolymer comprises PVDF.

24. A heat transfer element according to any one of claims 1 to 23, wherein the fluoropolymer is mixed with another thermoplastic polymer.

25. A heat transfer element according to claim 24, wherein the other thermoplastic polymer is an acrylic polymer.

26. A tubular heat transfer element according to any one of claims 1 to 25, formed by extruding a mixture of fluoropolymer, fibrous material and, where necessary, particulate or filamented thermally conductive material.

27. A process for the production of a heat transfer element according to any one of claims 1 to 25 comprising providing a fibrous base portion, and forming by compression moulding or lamination over the surface of the base portion a coating of a fluoropolymer.


28. A process according to claim 27, further including the step of distributing a thermally conductive material within the element.

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INTERNATIONAL PRELIMINARY EXAMINATION REPORT

(PCT Article 36 and Rule 70)

14

Applicant's or agent's file reference CTE/PL62889WO		FOR FURTHER ACTION See Notification of Transmittal of International Preliminary Examination Report (Form PCT/IPEA/416)	
International application No. PCT/GB00/00363	International filing date (day/month/year) 07/02/2000	Priority date (day/month/year) 08/02/1999	
International Patent Classification (IPC) or national classification and IPC C08K7/02			
Applicant H.B. FULLER COATINGS LTD. et al.			
<p>1. This international preliminary examination report has been prepared by this International Preliminary Examining Authority and is transmitted to the applicant according to Article 36.</p> <p>2. This REPORT consists of a total of 5 sheets, including this cover sheet.</p> <p><input checked="" type="checkbox"/> This report is also accompanied by ANNEXES, i.e. sheets of the description, claims and/or drawings which have been amended and are the basis for this report and/or sheets containing rectifications made before this Authority (see Rule 70.16 and Section 607 of the Administrative Instructions under the PCT).</p> <p>These annexes consist of a total of 3 sheets.</p>			
<p>3. This report contains indications relating to the following items:</p> <ul style="list-style-type: none"> I <input checked="" type="checkbox"/> Basis of the report II <input type="checkbox"/> Priority III <input type="checkbox"/> Non-establishment of opinion with regard to novelty, inventive step and industrial applicability IV <input type="checkbox"/> Lack of unity of invention V <input checked="" type="checkbox"/> Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement VI <input type="checkbox"/> Certain documents cited VII <input checked="" type="checkbox"/> Certain defects in the international application VIII <input type="checkbox"/> Certain observations on the international application 			
Date of submission of the demand 08/09/2000		Date of completion of this report 29.05.2001	
Name and mailing address of the international preliminary examining authority:  European Patent Office D-80298 Munich Tel. +49 89 2399 - 0 Tx: 523656 epmu d Fax: +49 89 2399 - 4465		Authorized officer Russell, G Telephone No. +49 89 2399 8738	



INTERNATIONAL PRELIMINARY EXAMINATION REPORT

International application No. PCT/GB00/00363

I. Basis of the report

1. With regard to the **elements** of the international application (*Replacement sheets which have been furnished to the receiving Office in response to an invitation under Article 14 are referred to in this report as "originally filed" and are not annexed to this report since they do not contain amendments (Rules 70.16 and 70.17)*):

Description, pages:

1-14 as originally filed

Claims, No.:

1-18,20-22 as received on 12/03/2001 with letter of 07/03/2001

2. With regard to the **language**, all the elements marked above were available or furnished to this Authority in the language in which the international application was filed, unless otherwise indicated under this item.

These elements were available or furnished to this Authority in the following language: , which is:

- ☐ the language of a translation furnished for the purposes of the international search (under Rule 23.1(b)).
- ☐ the language of publication of the international application (under Rule 48.3(b)).
- ☐ the language of a translation furnished for the purposes of international preliminary examination (under Rule 55.2 and/or 55.3).

3. With regard to any **nucleotide and/or amino acid sequence** disclosed in the international application, the international preliminary examination was carried out on the basis of the sequence listing:

- ☐ contained in the international application in written form.
- ☐ filed together with the international application in computer readable form.
- ☐ furnished subsequently to this Authority in written form.
- ☐ furnished subsequently to this Authority in computer readable form.
- ☐ The statement that the subsequently furnished written sequence listing does not go beyond the disclosure in the international application as filed has been furnished.
- ☐ The statement that the information recorded in computer readable form is identical to the written sequence listing has been furnished.

4. The amendments have resulted in the cancellation of:

- ☐ the description, pages:
- ☒ the claims, Nos.: 19,23-28
- ☐ the drawings, sheets:

5. ☐ This report has been established as if (some of) the amendments had not been made, since they have been considered to go beyond the disclosure as filed (Rule 70.2(c)):

**INTERNATIONAL PRELIMINARY
EXAMINATION REPORT - SEPARATE SHEET**

International application No. PCT/GB00/00363

Paragraph V:

1. Relevant documents:

D6 US-A-5 036 903

D7 US-A-4 911 227

D8 US-A-5 409 777

2. D6 relates to a heat recovery method and heat-exchanger having corrosion resistant tubes and tube sheets. One aspect is a corrosion-protection coating system for the side apertured tube sheets through which the graphite tubes of the heat-exchanger penetrate. The coating system comprises an inner silicon-carbide impregnated expoxidized novolak coating adherently affixed to the tube sheet and over which is a fiber-reinforced fluoroplastic layer (col 2, l 17-23; claim 1). The fiber-reinforcement comprises glass fiber, and the fluoroplastic comprises an elastomer derived from a combination of vinylidene and hexafluoropropylene (col 4, l 29-60; claims 8, 10).

D7 discloses a heat-exchange element composed of a sheet material which comprises glass fiber, an inorganic filler, and a binder (claim 1). This sheet may be coated with a coating material comprising an organic binder such as an acrylic resin (col 4, l 34-37).

The element further comprises a fluorine coating layer formed on the surface thereof (Example 4; claim 9). The heat-exchange may be a one sheet material or a honeycomb structure formed by laminating a plurality of sheets (claim 12).

D8 deals with a laminate useful in a heat exchanger having at least two layers, said laminate comprising at least one layer of a polymer having more than one perfluorocyclobutane groups to be coated on a substrate, and at least one reinforcing or filling layer which may contain glass fiber materials (claims 1, 5, 7, 18). The fluoropolymer forms a hydrostatically stable, chemically resistant coating on the substrate.

The perfluorocyclobutane containing polymer also contains other materials including metal particles (col 16, l 9-24). They are useful in composites wherein the polymer surrounds, thus forms layers around such materials as fiber glass, particularly fiber glass mats (woven or non-woven) (col 16, l 30-54). Examples 12 and 13 describe the preparation of fluoropolymer coated woven glass fiber mat

(electrical glass).

Therefore, the subject-matter of claims 1-3, 6, 7, 10, 11, 14-16, 18, and 21 do not fulfil the requirements of novelty and inventiveness laid out in Articles 33(2) and 33(3) PCT.

3. The technical problem of the present application, namely to provide a heat transfer element having improved heat transfer and mechanical properties and resistance to corrosion, has already been solved in the prior art using heat transfer elements comprising fluoropolymers and glass fibers to provide improved heat-transfer properties and resistance to chemical corrosion. Hence, the inventive concept underlying the application is known and obvious from the teachings of the prior art.
Dependent claims 4, 8, 9, 12, 13, 17, 20, and 22 merely represent standard modifications in the technical field which have not been shown in the application to provide any surprising or non-obvious technical advantage.
Hence, an inventive merit under Article 33(3) PCT cannot be recognized.

Paragraph VII:

1. The claims have been wrongly numbered, i.e., namely from 1-18 and 20-22, claim 19 having been omitted.

INTERNATIONAL PRELIMINARY EXAMINATION REPORT

International application No. PCT/GB00/00363

(Any replacement sheet containing such amendments must be referred to under item 1 and annexed to this report.)

6. Additional observations, if necessary:

V. Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

1. Statement

Novelty (N)	Yes:	Claims	4,8,9,12,13,17,20,22
	No:	Claims	1-3,6,7,10,11,14-16,18,21
Inventive step (IS)	Yes:	Claims	
	No:	Claims	1-22
Industrial applicability (IA)	Yes:	Claims	1-22
	No:	Claims	

2. Citations and explanations
see separate sheet

VII. Certain defects in the international application

The following defects in the form or contents of the international application have been noted:
se separate sheet

ENT COOPERATION TREATY

PCT

INTERNATIONAL SEARCH REPORT

(PCT Article 18 and Rules 43 and 44)

Applicant's or agent's file reference CTE/PL62889W0	FOR FURTHER ACTION see Notification of Transmittal of International Search Report (Form PCT/ISA/220) as well as, where applicable, item 5 below.	
International application No. PCT/GB 00/ 00363	International filing date (day/month/year) 07/02/2000	(Earliest) Priority Date (day/month/year) 08/02/1999
Applicant H.B. FULLER COATINGS LTD. et al.		

This International Search Report has been prepared by this International Searching Authority and is transmitted to the applicant according to Article 18. A copy is being transmitted to the International Bureau.

This International Search Report consists of a total of 3 sheets.

☒ It is also accompanied by a copy of each prior art document cited in this report.

1. Basis of the report

- a. With regard to the **language**, the international search was carried out on the basis of the international application in the language in which it was filed, unless otherwise indicated under this item.

☐ the international search was carried out on the basis of a translation of the international application furnished to this Authority (Rule 23.1(b)).

- b. With regard to any **nucleotide and/or amino acid sequence** disclosed in the international application, the international search was carried out on the basis of the sequence listing :

☐ contained in the international application in written form.

☐ filed together with the international application in computer readable form.

☐ furnished subsequently to this Authority in written form.

☐ furnished subsequently to this Authority in computer readable form.

☐ the statement that the subsequently furnished written sequence listing does not go beyond the disclosure in the international application as filed has been furnished.

☐ the statement that the information recorded in computer readable form is identical to the written sequence listing has been furnished

2. ☐ **Certain claims were found unsearchable** (See Box I).

3. ☐ **Unity of invention is lacking** (see Box II).

4. With regard to the **title**,

☒ the text is approved as submitted by the applicant.

☐ the text has been established by this Authority to read as follows:

5. With regard to the **abstract**,

☒ the text is approved as submitted by the applicant.

☐ the text has been established, according to Rule 38.2(b), by this Authority as it appears in Box III. The applicant may, within one month from the date of mailing of this international search report, submit comments to this Authority.

6. The figure of the **drawings** to be published with the abstract is Figure No.

☐ as suggested by the applicant.

☐ because the applicant failed to suggest a figure.

☐ because this figure better characterizes the invention.

☒ None of the figures.